

REMARKS

The Office Action dated June 12, 2008 has been received and carefully noted. The above listing of the claims and the following remarks, are submitted as a full and complete response thereto.

Claims 1-12 and 14-38 are presently pending in the application and are respectfully submitted for reconsideration.

Claims 1-15 and 17-22 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,694,471 of Sharp ("Sharp"). Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested by Sharp.

Claim 1 is directed to a system including a plurality of entities. At least two of said entities are configured to use stream control transmission protocol for signaling therebetween. The stream control transmission protocol signaling includes a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of said entities. The connection identity information identifies the ultimate destination of said data.

Claim 20, upon which claims 23-37 depend, is directed to a method including sending stream control transmission protocol transport signaling information from an entity to another entity. The stream control transmission protocol signaling information includes a source port number, a destination port number, data, and connection identity information relating to a connection between said two entities. The connection identity information identifies the ultimate destination of said data.

Claim 21, upon which claims 2-12 and 14-19 depend, is directed to an apparatus including a transmitter configured to send to another entity a stream control transmission protocol transport packet. The transmitter is configured to include in said packet a source port number, a destination port number, data, and connection identity information relating to a connection between the entity and the another entity. The connection identity information identifies the ultimate destination of said data.

Claim 22 is directed to an apparatus including sending means for sending to another entity a stream control transmission protocol transport packet. The apparatus also includes including means for including in said packet a source port number, a destination port number, data, and connection identity information relating to a connection between the entity and the another entity. The connection identity information identifies the ultimate destination of said data.

Claim 38 is directed to a computer-readable medium encoded with instructions that, when executed perform a process. The process includes sending stream control transmission protocol transport signaling information from an entity to another entity. The stream control transmission protocol signaling information comprises a source port number, a destination port number, data, and connection identity information relating to a connection between said two entities. The connection identity information identifies the ultimate destination of said data.

Applicant respectfully submits that Sharp fails to disclose or suggest all of the elements of any of the presently pending claims.

Sharp generally relates to a system and method for periodic retransmission of messages. More specifically, Sharp discusses a system and method for periodic retransmission of messages from a source (computer 12/application 16) to a destination (another computer 12/application 16). The packet transport service may be the Stream Control Transmission Protocol (SCTP).

In particular, Sharp discloses a method for transmitting SCTP data and control chunks between a SCTP source endpoint and an SCTP destination endpoint. Several SCTP data/control chunks are bundled into one SCTP packet and sent to the SCTP destination endpoint. SCTP data/control chunks which are determined not to have arrived at the SCTP destination endpoint are inserted into an SCTP packet and resent. Sharp is generally concerned with ensuring that the SCTP data/control chunks to be retransmitted are included in existing SCTP packets to avoid any unnecessary use of resources.

Sharp fails to disclose that “said stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of said entities, and wherein said connection identity information identifies the ultimate destination of said data”, as recited, in part, in independent claim 1, and similarly in independent claims 20-22 and 38. Sharp does not disclose modifying any SCTP packets or any SCTP data/control chunks. Sharp merely describes using standard SCTP packets and SCTP data/control chunks.

The SCTP chunk headers of Sharp are standard SCTP chunk headers and do not include any additional information above that of a standard SCTP chunk header as commonly known in the art (columns 3 and 4 of Sharp refer to SCTP in its standardized context without any modification of the standard SCTP packets). For instance, Sharp discloses “SCTP provides for the bundling of multiple data and/or control chunks 54 in a single packet 50 to improve efficiency” (see column 4, lines 40-45 of Sharp). Sharp does not disclose the inclusion of any additional information in the SCTP chunk header. Nor does Sharp describe the purpose of any information contained in the SCTP chunk header over that of the standard information in a SCTP chunk header.

Sharp is directed to the retransmission of SCTP data/control chunks in SCTP packets. It may be presumed that since Sharp discloses using SCTP, that the data networking disclosed in Sharp, is, in fact, carried out within the SCTP layer. This being the case, the source endpoint 12 and destination endpoint 12 of Sharp must invoke a SCTP source endpoint and destination endpoint. As such, Sharp cannot be directed to the properties of further propagation of the data already encapsulated within the SCTP data/control chunks. Referring to column 4, lines 26 to 40 of Sharp, a standard SCTP header is disclosed as being well known in the art (i.e., “SCTP packet 50 includes a common header 42 and one or more chunks 54”). Sharp does not disclose any additional information contained in the header above the standard SCTP header information.

The Office Action alleged that the “connection identity information” identifying the “ultimate destination of the data” is disclosed by Sharp in column 2, lines 62 to

column 3, line 3 and column 4, line 64 to column 5, line 2 and FIG. 1. Applicant disagrees that Sharp discloses the connection identity information as identifying the ultimate destination of the data.

Referring to column 2, line 62 to column 3, line 3 of Sharp, a message from a user application in a source computer is encapsulated through the source protocol stack 18 and is communicated through the network via the destination protocol stack 18 to the destination user application 16. Applicant submits that this example is simply the standard flow of data across a network. There is no indication that the final destination of the data is identified by connection identification information contained within the SCTP header. In fact, to the contrary, there is an implication that the SCTP layer functions as a standard SCTP layer in this respect (note the next 10 lines in column 3 of Sharp which exemplify the use of SCTP).

Referring to column 4 line 64 to column 5, line 2 of Sharp, a destination endpoint and source endpoint clearly refer to the SCTP specific source and destination endpoints as being identified the source and destination port numbers (see 56 and 58 of FIGS. 2 and 3 of Sharp). There is no indication that the destination endpoint is the ultimate endpoint of the data. In fact, considering that the destination endpoint acknowledges the SCTP data chunk and does not deal with the data encapsulated within the chunk, it is readily implied that the final destination of the data has not been reached.

Contrary to the example SCTP packet of FIG. 3 of Sharp, the present application offers an approach that is beyond the scope of Sharp's disclosure. Considering FIG. 5 of

the present application, the SCTP common header 102 ends before the IPv6 header 100 begins. Clearly, a destination address of the IPv6 header 100 is in addition to the destination port of the SCTP common header 102. Referring again to the claim recitations of claim 1, “said stream control transmission protocol signaling comprises a source port number, a destination port number, data, and connection identity information relating to a connection between at least two of said entities, and wherein said connection identity information identifies the ultimate destination of said data (emphasis added). The disclosure of Sharp does not extend beyond basic “SCTP” packet switching. FIG. 5 and the claims of the present application offer more than simply SCTP packets.

Therefore, Applicants submit that Sharp fails to teach all of the subject matter of independent claims 1, 20-22 and 38. By virtue of dependency, Sharp also fails to teach the subject matter of those claims dependent thereon. Withdrawal of the rejection of claims 1-15 and 17-22 is kindly requested.

Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp in view of U.S. Patent Application Publication No. 2001/0053145 of Willars (“Willars”). The Office Action admitted Sharp does not disclose a forwarding unit configured to forward stream control transmission control packets, and relied on Willars to cure this deficiency in Sharp. Applicant respectfully submits that claim 16 recites subject matter that is neither disclosed nor suggested by the combination of Sharp and Willars.

Claim 16 depends from and further limits claim 1. At least some of the deficiencies of Sharp with respect to claim 1 are discussed above. Willars does not remedy the above-identified deficiencies of Sharp.

Willars generally relates to combining differing transport technologies in a telecommunication system. The application layer is a radio network layer of a wireless telecommunications system. In at least some embodiments of the present invention a transport layer interworking function is situated on an interface between two nodes of the radio access network (RAN). The interworking function can be located in a separate node which may be a node having both ATM and internet protocol (IP) interfaces.

The Office Action cited Willars with respect to a feature relating to forwarding SCTP packets. As discussed above, there is no disclosure in Sharp of SCTP signaling comprising "data and connection identity information relating to a connection between at least two of said entities, wherein said connection identity information identifies the ultimate destination of said data" as recited in the presently pending claims. Claim 16 is dependent upon claim 21, which includes the above-noted feature which is deficient in Sharp. Willars is deficient with respect to the features recited in claim 16 at least for the reason that Willars is deficient with respect to all of the features of claim 21 which are not disclosed in Sharp. Therefore, the combination of Sharp and Willars fail to disclose all of the features recited in claim 16. Withdrawal of the rejection is kindly requested.

For at least the reasons discussed above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the elements of the claimed invention.

These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-12 and 14-38 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Kamran Emdadi
Registration No. 58,823

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

KE:sjm

Enclosures: Petition for Extension of Time
Check No. 19953